

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

_____)	
HYBIR, INC.,)	
)	Civ. Action. No. 1:20-cv-10329-IT
Plaintiff,)	
)	
vs.)	ORAL ARGUMENT REQUESTED
)	
VEEAM SOFTWARE CORPORATION,)	
)	
Defendant.)	
_____)	

PLAINTIFF’S OPPOSITION TO DEFENDANT’S AMENDED
MOTION TO DISMISS (D.I. 35)

TABLE OF CONTENTS

TABLE OF AUTHORITIES	ii
I. INTRODUCTION	1
II. STATEMENT OF FACTS	2
A. Procedural History	2
B. The Asserted Patents.....	2
C. Defendant Failed to Establish a Representative Claim.....	5
D. The '043 Patent	6
E. The '545 Patent	7
F. The '146 Patent	8
III. LEGAL STANDARDS	8
A. Motions Under Rule 12.....	8
B. Section 101 at the Pleading Stage.....	9
IV. ARGUMENT	10
A. The Claims Are Not Directed to Abstract Ideas	10
B. The Claims Are Not Abstract at Step Two Because the Claims Contain an Inventive Concept	19
C. Questions of Fact Preclude Judgment on the Pleadings	21
V. CONCLUSION.....	22

TABLE OF AUTHORITIES

Cases

<i>Aatrix Software, Inc. v. Green Shades Software, Inc.</i> ,	
890 F.3d 1354 (Fed. Cir. 2018).....	9, 20, 21
<i>Alice Corp. Pty. Ltd. v. CLS Bank International</i> ,	
134 S. Ct. 2347 (2014)	9, 10, 19
<i>Avocent Huntsville, LLC v. ZPE Systems, Inc.</i> ,	
No 3:17-cv-04319-WHO, 2018 WL 1411100, at *11-13 (N.D. Cal. Mar. 21, 2018)	18
<i>Bancorp Servs., LLC v. Sun Life Assur. Co. of Can. (U.S.)</i> ,	
687 F.3d 1266 (Fed. Cir. 2012).....	21
<i>Baxter Int’l, Inc. v. Carefusion Corp.</i> ,	
No. 15-cv-9986, 2016 WL 2770787, at *9 (N.D. Ill. May 13, 2016)	18
<i>Berkheimer v. HP Inc.</i> ,	
881 F.3d 1360 (Fed. Cir. 2018).....	<i>passim</i>
<i>CardioNet, LLC v. Scottcare Corp.</i> ,	
388 F. Supp. 3d 442 (E.D. Pa. 2019)	17
<i>CardioNet, LLC v. InfoBionic, Inc.</i> ,	
955 F.3d 1358 (Fed. Cir. 2020).....	<i>passim</i>
<i>Cellspin Soft, Inc. v. Fitbit, Inc.</i> ,	
927 F.3d 1306 (Fed. Cir. 2019).....	9
<i>Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.</i> ,	
880 F.3d 1356 (Fed. Cir. 2018).....	9, 21
<i>Cronos Techs., LLC v. Expedia, Inc.</i> ,	
No. CV 13-1538-LPS, 2015 WL 5234040, at *3 (D. Del. Sept. 8, 2015)	6
<i>Data Engine Techs. LLC v. Google LLC</i> ,	
906 F.3d 999 (Fed. Cir. 2018).....	12, 15
<i>DDR Holdings, LLC v. Hotels.com, L.P.</i> ,	
773 F.3d 1245 (Fed. Cir. 2014).....	10
<i>Egenera, Inc. v. Cisco Sys., Inc.</i> ,	
234 F. Supp. 3d 331 (D. Mass. 2017)	16, 20

<i>Enfish, LLC v. Microsoft Corp.</i> , 822 F.3d 1327 (Fed. Cir. 2016).....	9, 10, 11, 16
<i>Illumina, Inc. v. Natera, Inc.</i> , No. 18-CV-01662-SI, 2018 WL 3126383, at *4 (N.D. Cal. June 26, 2018)	21
<i>Immersion Corp. v. Fitbit, Inc.</i> , 313 F. Supp. 3d 1005 (N.D. Cal. Mar. 5, 2018).....	18
<i>InfoGation Corp. v. ZTE Corp.</i> , No. 16-CV-01901-H-JLB, 2017 WL 1135638, at *6 (S.D. Cal. Mar. 27, 2017)	14
<i>Intellectual Ventures I LLC v. Erie Indem. Co.</i> , 850 F.3d 1315 (Fed. Cir. 2017).....	17
<i>Ironworks Patents, LLC v. Apple Inc.</i> , No. CV 17-1399-RGA, 2018 WL 2944475, at *3 (D. Del. June 12, 2018).....	18
<i>Lipitor Antitrust Litigation</i> , No. 3:12-cv-2389, 2013 WL 4780496, at *1 (D.N.J. Sept. 5, 2013)	15
<i>Loestrin 24 Fe Antitrust Litig.</i> , 814 F.3d 538 (1st Cir. 2016).....	9
<i>Mayo Collaborative Servs. V. Prometheus Labs., Inc.</i> , 132 S.Ct. 1289 (2012)	10
<i>McRO, Inc. v. Bandai Namco Games America Inc.</i> , 837 F.3d 1299 (Fed Cir. 2016).....	11
<i>Mobile Telecommunications Techs., LLC v. Leap Wireless Int’l, Inc.</i> , No. 2:13-CV-885-RSP, 2015 WL 5604691, at *4 (E.D. Tex. Sept. 23, 2015).....	14
<i>Network Congestion Solutions, LLC v. U.S. Cellular Corp.</i> , 170 F. Supp. 3d 695 (D. Del. 2016)	19
<i>PersonalWeb Technologies LLC v. Google LLC</i> , No. 5:13-cv-01317-EJD, 2020 WL 520618, at *12 (N.D. Cal. Jan. 31, 2020).....	18
<i>Polaris Innovations Ltd. v. Kingston Tech. Co.</i> , 223 F. Supp. 3d 1026 (C.D. Cal. 2016).....	18
<i>POWERbahn, LLC v. Found. Fitness LLC</i> , No. 3:15-cv-00327-MMD-WGC, 2016 WL 4318978, at *3 (D. Nev. Aug. 11, 2016)	18

<i>Pure Data Sys., LLC v. Ubisoft, Inc.,</i>	
No. 18-CV-00852-JCS, 2018 WL 3417530, at *10 (N.D. Cal. July 13, 2018)	21
<i>Rodi v. Southern New England School of Law,</i>	
389 F.3d 5 (1st Cir. 2004)	9
<i>Sophos Inc. v. Rpost Holdings, Inc.,</i>	
2016 WL 3149649, at *12 (D. Mass. June 3, 2016)	20
<i>Symantec Corp. v. Zscaler, Inc.,</i>	
No. 17-CV-04426-JST, 2018 WL 3539269, at *5 (N.D. Cal. July 23, 2018)	21
<i>Synchronoss Techs., Inc. v. Dropbox Inc.,</i>	
No. 16-cv-00119-HSG, 2016 WL 7406494, at *6 (N.D. Cal. Dec. 22, 2016).....	14
<i>Teleconference Sys. LLC v. Metaswitch Networks Corp.,</i>	
No. 6:18-CV-234-JDK, 2019 WL 6699820, at *4 (E.D. Tex. Feb. 5, 2019).....	14
<i>Thales Visionix Inc. v. United States,</i>	
850 F.3d 1343 (Fed. Cir. 2017).....	18
<i>TLI Communications LLC Patent Litigation,</i>	
823 F.3d 607 (Fed. Cir. 2016).....	18
<i>TMI Solutions LLC v. Bath & Body Works,</i>	
No. 17-965-LPS-CJB, 2018 WL 4660370, at *8 (D. Del. Sept. 28, 2018).....	21
<i>Trading Techs. Int'l, Inc. v. CQG, Inc.</i>	
675 Fed. Appx. 1001 (Fed. Cir. 2017)	16, 17
<i>Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.,</i>	
617 F.3d 1296 (Fed. Cir. 2010).....	22
<i>Visual Memory LLC v. NVIDIA Corp.,</i>	
867 F.3d 1253 (Fed. Cir. 2017).....	11
Other Authorities	
Fed. R. Civ. P. 12(b)(6).....	<i>passim</i>
Statutes	
35 U.S.C. § 101.....	<i>passim</i>

Plaintiff Hybir, Inc. (“Plaintiff” or “Hybir”) hereby opposes Defendant Veeam Software Corp.’s (“Defendant” or “Veeam”) Amended Rule 12(b)(6) Motion to Dismiss for Patent Ineligibility Under 35 U.S.C. § 101 as to U.S. Patent Nos. 8,051,043 (the “’043 Patent”), 9,037,545 (the “’545 Patent”) and 9,679,146 (the “’146 Patent”) (collectively, the “Asserted Patents”).

I. INTRODUCTION

The Asserted Patents’ claims are all patent eligible under 35 U.S.C. § 101. The Asserted Patents’ claims describe methods, systems, and physical apparatuses that improve computer functionality directed to backup and restoration operations by incorporating innovative source-side identification and global data deduplication techniques. The Asserted Patents’ claims address technological problems related to methods of data management, specifically for data backup and restoration processes, with solutions that maximize storage utilization, decrease bandwidth requirements, and control access to data for file systems especially during computer data backup and restoration. Rather than address these various technical problems and claimed solutions, Defendant attempts to whitewash them through overly generalized paraphrasing and oversimplification of the claims, *e.g.* citing a library card catalog system as a comparison to the claimed invention. Much as the Federal Circuit recognized in *CardioNet*,¹ a 101 analysis of the type done here that oversimplifies the claims and fails to properly account for the technological problems being addressed and the technological nature of the solutions is not correct. The failure of Defendant’s approach is evident, among other things, in its failure to recognize the clear differences between the claims of the Asserted Patents and to provide any support for selecting a single claim from each as representative despite the many differences between the claims.

¹ *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358 (Fed. Cir. 2020).

Accordingly, Hybir respectfully requests the Court deny Defendant's Amended Motion and find that the Asserted Patents claim eligible subject matter under 35 U.S.C. § 101 or, in the alternative and in view of *Berkheimer*,² preclude judgment at this stage as there are questions of fact that underline the Court's patent eligibility determination.

II. STATEMENT OF FACTS

A. Procedural History

On February 19, 2020, Hybir filed the Complaint (D.I. 1) alleging that Defendant infringed the Asserted Patents. The parties agreed to an extension of time to answer, and on May 11, 2020 Defendant filed its Motion to Dismiss (D.I. 18) and supporting Brief (D.I. 19). After the June 8, 2020 Rule 16 Scheduling Conference with the Court, the parties agreed to extend and amend the deadlines associated with Defendant's Motion to Dismiss (D.I. 31). On June 24, 2020, Defendant filed its Amended Motion to Dismiss (D.I. 35) and supporting Brief (D.I. 36).

B. The Asserted Patents

The Asserted Patents are part of a family of patents,³ each entitled "Group Based Complete and Incremental Computer File Backup System, Process and Apparatus," that identify and set out to solve several technical problems relating to data management unique to computer networks and in particular to the back up and restoration of electronic data on such networks. '043 Patent at 1:8-10. Like *CardioNet* and as discussed below, the Asserted Patents' specification identifies several advantages gained by the elements recited in the claimed inventions. Given how much businesses and individuals rely on computers, it has become critically important to back up data regularly in case such data is damaged or destroyed and needs to be restored. Managing data during such

² *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018).

³ The '545 Patent and the '146 Patent are continuations of the '043 Patent and share the same specification, and that for convenience, citations to the specification made herein are of the '043 Patent.

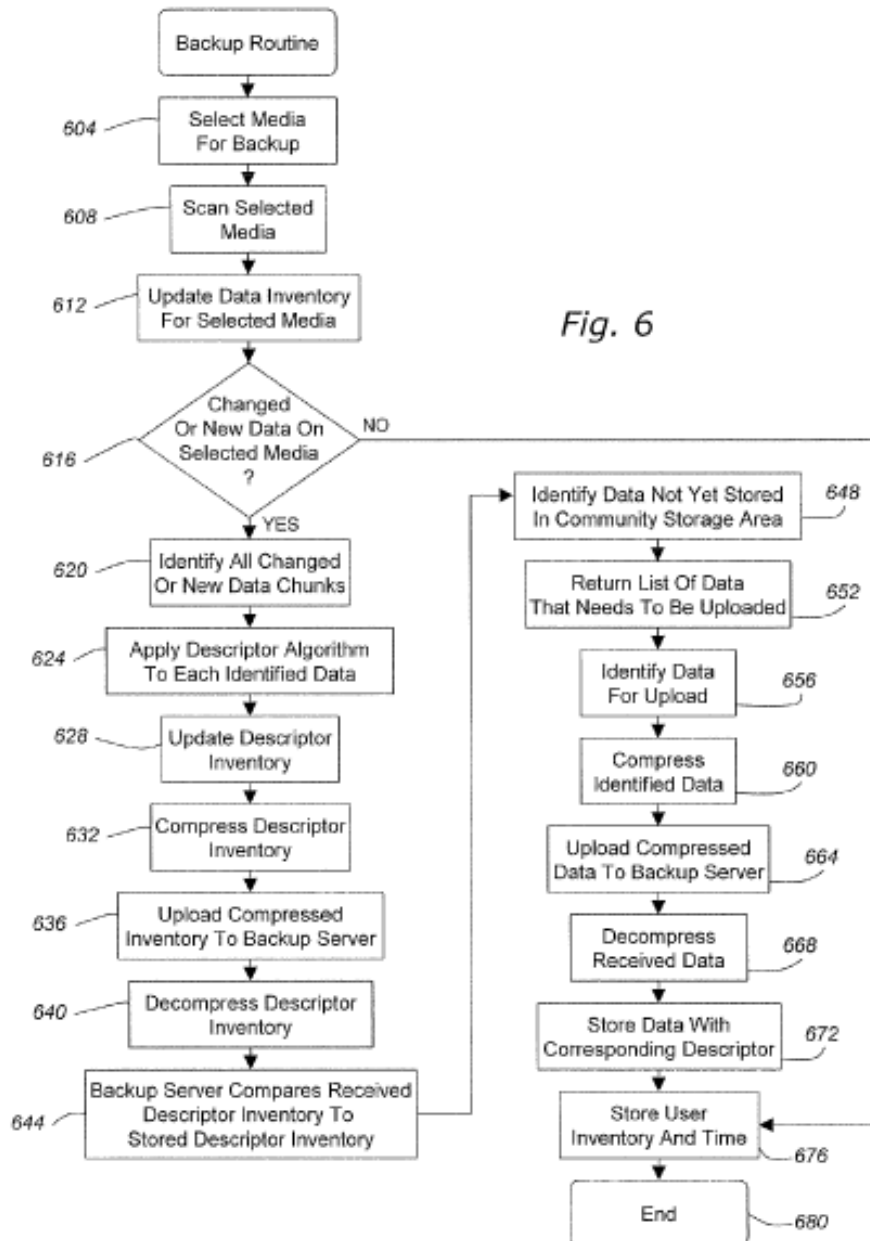
backup and restore operations, including controlling which users have rights to particular files, is extremely difficult, resource intensive, and critical to maintaining data privacy. *Id.* at 1:17-21. Prior to Hybir's inventions, rights management and file identification were inefficient, requiring systems to make large concessions and compromises. *Id.* at 1:21-24. Some of these prior systems managed data on a per-user basis and backed up separate files for each user, resulting in the inefficient transmission and storage of large data backups littered with duplicate data sets. *Id.* at 1:25-35 and 1:39-43; (D.I. 1, ¶ 12). Existing systems also lacked the technology to efficiently and effectively compare large backup data sets and guarantee the uniqueness of each file stored in backup systems. '043 Patent at 1:47-67; (D.I. 1, ¶ 13).

To address these problems, the Asserted Patents describe technological solutions that provide the ability to back up and restore files of a computer using source-side data identification and global data deduplication technologies. (D.I. 1, ¶ 6). Solutions described in the Asserted Patents include the following:

- (1) generating descriptors including cryptographic signatures based on actual data in files for the electronic data on the source side (*e.g.* the user's computer) to be backed up;
- (2) compressing and transmitting these descriptors from the source side to the backup server;
- (3) comparing these descriptors to descriptors previously stored on the backup server to identify data chunks that are not stored in the backup system;
- (4) generating lists of descriptors that identify electronic data portions for upload to the backup storage, which are compressed and transmitted to the source side;
- (5) identifying corresponding data to be uploaded to the backup server;
- (6) compressing only such corresponding data and uploading same with corresponding descriptors to the backup system for storage; and

(7) using the descriptors during a restore operation to the same source side machine or a different one to determine which files are already present on that source side machine.

See, e.g., '043 Patent at 2:37-60, 6:24-35, 8:42-67; 9:1-6, 12:12-67, 13:1-60, 14:2-13. Further, as shown here, figure 6 of the Asserted Patents depicts aspects of a backup routine in accordance with certain embodiments of the present invention.



Descriptors are generally cryptographic signatures generated using mathematical operations based on data from files, which may include file metadata, *e.g.*, file storage location and other bibliographic information pertaining to the file. *Id.* at 2:37-44. Generating descriptors this way ensures that common data from files have the same substantially unique descriptors. *Id.* at 9:59-10:5. The use of such descriptors allows the storage of many files without any substantially identical files being stored more than once, without providing the files and without comparing files bit for bit, as in prior art systems. *Id.* at 2:47-58. This increases storage efficiency, frees up more storage capacity, lowers cost in the amount of storage space needed, and decreases bandwidth requirements. *Id.* at Abstract.

As the Complaint describes in Paragraphs 12-21, the industry, including Veeam, has recognized these as technical solutions to technical problems, unique to the context of computer networks. *See, e.g.*, Ex. B⁴ at 10 (Before the PTO, Veeam argued that its “claimed invention addresses the technological problem[] of . . .how to avoid copying unnecessary data blocks from the source disk during backup”); Ex. C at 9 (“To reduce the amount of data going over WAN, Veeam Backup & Replication uses the global data deduplication mechanism....[to] eliminate[] [the] transfer of redundant data over WAN.”); and Ex. D (“Virtual servers and virtual desktops benefit from deduplication because files for each virtual machine to be coalesced into a single storage space which allows nominally separate system.”).

C. Defendant Failed to Establish a Representative Claim

While it may be appropriate to rely on analysis of a “representative claim,” it is the movant’s burden to “adequately articulate[]” that such representative claim “adequately represent[s]” the other claims and that the other claims do not “add one or more inventive concepts

⁴ All exhibits are attached to the concurrently filed Declaration of Seth Ostrow (“Ostrow Decl.”).

that would result in patent eligibility.” *Cronos Techs., LLC v. Expedia, Inc.*, No. CV 13-1538-LPS, 2015 WL 5234040, at *3 (D. Del. Sept. 8, 2015) (“Defendants must provide at least some meaningful analysis for each of the challenged claims.”). Here, Defendant designated claim 1 of each Asserted Patent as a “representative claim” of all claims of the Asserted Patents whose patent-eligibility can be imputed to all claims. Defendant failed, however, to offer any analysis of why all the claims in the Asserted Patents should be treated the same as these three identified claims. And indeed, in this case, they should not, as explained further below.

D. The '043 Patent

The '043 Patent, issued on November 1, 2011, consists of forty claims, six of which are independent. (D.I. 1 at ¶ 7.) The independent claims are directed to methods, physical devices, and systems related to electronic data management, specifically backup and restore processes. Defendant’s superficial and futile analysis consists only of independent claim 1, which is directed to a method of determining whether to upload electronic data from the source side to the backup side using the unique descriptors described above, which are generated and transmitted to the backup server where they are compared to descriptors of previously stored electronic data. Claim 1 further recites that when descriptors from the source side and backup server substantially match, the backup server reports these results to the communication device and the corresponding electronic data is not backed up.

Defendant’s analysis ignores the limitations and inventive concepts disclosed in dependent claims 2-14 of the method described in claim 1. (*See, e.g., id.* at 19.) Specifically, claims 2-4 describe a scenario where descriptors from the communication device do not substantially match the descriptors stored in the backup server. Unlike claim 1, the communication device transmits the electronic data to the backup server for storage. In addition, claim 6 relates to a method having

two different users storing electronic data. Claims 11-13 further limit claim 1 as they describe a restore operation of a third device. The backup side may transmit previously stored electronic data of the third device as well as previously uploaded and stored data from other devices/users.

In addition, Defendant's representative claim argument neglected considering the five other independent claims and the claims depending from those claims. For instance, independent claim 15 is directed to a physical device that follows the method described in claim 1 and independent claim 25 describes an electronic data backup system for storing electronic data on a plurality of communication devices of at least two different users. Perhaps more importantly, independent claims 30 and 35 are directed to a method and device for restoring electronic data from a backup server to a communication device, which are noticeably distinct from claim 1.

By failing to consider the many different aspects of these other claims, Defendant failed to satisfy the rigorous standards necessary to establish claim 1 as "representative" of all claims in the '043 Patent.

E. The '545 Patent

The '545 Patent, issued on May 19, 2015, consists of twenty claims, two of which are independent. (D.I. 1 at ¶ 8.) Defendant designated independent claim 1 as the "representative claim" of the '545 Patent without considering limitations of the dependent claims or independent claim 10 that relates to a physical apparatus. In addition, Defendant treated claim 1 of the '545 Patent the same as claim 1 of the '043 Patent even though it recites additional inventive features. In claim 1, the process begins with an exchange of encrypted communication between the communication device and backup side. The backup side transmits an encrypted message requesting to backup data from the communication device. In response, the communication device initiates a backup routine as described in the '043 Patent. Dependent claims 2-9 disclose additional

limitations. For example, claim 7 adds the limitation of “compressing the one or more files prior to causing the one or more files to be transmitted to the backup server.” (D.I. 1, Ex. B at 19:31-33). As with the ’043 Patent, these distinctions demonstrate that Defendant failed to establish claim 1 as representative.

F. The ’146 Patent

The ’146 Patent, issued on June 13, 2017, consists of seven claims, one of which is an independent claim. (D.I. 1 at ¶ 9.) Independent claim 1 describes a solution for synchronization of a first client device onto a second client device. In claim 1, electronic data from one device is stored in a backup server. At the backup server, the system then determines whether a second device’s system contains the recently backed up electronic data and if not, whether the second device is granted access to the data (by the cryptographic signature). If the second device is granted access, the backup server transmits the electronic data (originally on the first device) to the second device). Dependent claims 2-7 describe further limitations, such as the first and second communication device are associated with a common user (claim 6).

Having failed to make an effort to satisfy its burden to demonstrate that all claims rise and fall together, Defendant’s argument that claim 1 of each Asserted Patent is a “representative claim” should be rejected.

III. LEGAL STANDARDS

A. Motions Under Rule 12

Under Rule 12(b)(6), the moving party must show that the pleadings fail to state a claim upon which relief may be granted. Fed. R. Civ. P. 12(b)(6). When considering Rule 12(b)(6) motions, the Court must accept all well-pled facts as true and draw all reasonable inferences in favor of the non-moving party. *In re Loestrin 24 Fe Antitrust Litig.*, 814 F.3d 538, 549 (1st Cir.

2016). When considering whether a pleading is sufficient, it is proper for a district court to consider the pleading itself and all attachments, along with matters of properly subject to judicial notice. *See Rodi v. Southern New England School of Law*, 389 F.3d 5, 12 (1st Cir. 2004).

B. Section 101 at the Pleading Stage

“A patent is presumed valid, and the burden of establishing invalidity of a claim rests on the party asserting invalidity by clear and convincing evidence.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1364 (Fed. Cir. 2018). The Federal Circuit has advised that in considering a claim’s patent eligibility based on 35 U.S.C. § 101, a genuine issue of fact regarding whether the claims “perform well-understood, routine, and conventional activities to a skilled artisan” would render a determination improper even at summary judgment. *Berkheimer*, 881 F.3d at 1370. Given the significantly lower standard for pleading under Rule 12(b)(6), a question of fact on this issue also precludes dismissal of the complaint. *See, e.g., Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1357 (Fed. Cir. 2018); *see also Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1318 (Fed. Cir. 2019) (factual disputes about whether an aspect of the claims is inventive precludes dismissal at the pleadings stage under § 101). Thus, although it may sometimes be appropriate to rule on Section 101 issues of patentability at the pleading stage, ruling at that time may be premature. *Aatrix Software, Inc.*, 890 F.3d at 1357.

In *Alice*, the Supreme Court provided guidance for analyzing whether a claim is directed to an abstract idea (“Step One”), and if it is whether it nonetheless rises to a level of innovation that is still patent eligible (“Step Two”). *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2355 (2014). Where a patent is directed to a technological solution to a technological problem, it is not directed to an abstract idea at Step One. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-1336 (Fed. Cir. 2016). The U.S. Supreme Court further explained that “[a]t some

level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” therefore, courts must “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2354 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293-1294 (2012)). The Federal Circuit has further cautioned that courts should not “disregard[] the written description’s recitation of the advantages of the claimed invention.” *CardioNet, LLC*, 955 F.3d at 1371.

If a claim is not abstract at Step One, there is no need to reach Step Two. *Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2355. If the district court proceeds to Step Two, the “claims are taken together as an ordered combination” to determine whether they “recite an invention that is not merely the routine or conventional use” of a computer. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014). Thus, the cautions set forth in *Berkheimer* and *Aatrix* are particularly apt at Step Two, where the court analyzes whether limitations in the claims are well-understood, routine, and conventional.

IV. ARGUMENT

A. The Claims Are Not Directed to Abstract Ideas

Step One is not an exercise in describing the claims at the highest level possible, which would render this step superfluous and all claims abstract. The Federal Circuit has confirmed that courts must be cautious at Step One to not describe the claims “at such a high level of abstraction and untethered from the language of the claims [because this] all but ensures that the exceptions to § 101 swallow the rule.” *Enfish, LLC*, 822 F.3d at 1337. This, however, is precisely what Defendant has done in its motion.

The Asserted Patents describe improved methods of data management, specifically for data backup and restoration processes, that maximize storage utilization, decrease bandwidth

requirements, and control access to data for file systems, computer data backup, and computers in general.⁵ See *Enfish, LLC*, 822 F.3d at 1335-1336 (holding that “specific improvement[s] to the way computers operate” are not abstract); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017) (claims directed to improvements in computer memory are patent eligible). In laying out these technical problems and solutions afforded by the claimed inventions, the specifications of the Asserted Patents confirm that the claims are directed to eligible subject matter. *CardioNet, LLC*, 955 F.3d at 1358 (finding that a patent’s written description identifies several advantages gained by the elements recited in the claimed cardiac monitoring device).

Defendant’s high-level, abstract summary of the Asserted Patents’ claims as “using shorthand descriptors to compare lists of items,” (D.I. 36 at 2) and “organizing ‘electronic data’ or ‘electronic files’” (*Id.* at 11) misses the claim language by a wide margin, rendering Defendant’s analysis moot. See *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (cautioning courts to “avoid oversimplifying the claims”) (citation and quotations omitted); see also *CardioNet, LLC*, 955 F.3d at 1358 (“Generalizing the asserted claims as being directed to collecting, analyzing, and reporting data is inconsistent with the [Federal Circuit’s] instruction that courts ‘be careful to avoid oversimplifying the claims’ by looking at them generally and failing to account for the specific requirements of the claims.”) (internal citation omitted). In its amended brief, the Defendant’s attempts to distinguish this case from *CardioNet* suffer from the same problem addressed in that case itself, that is, its comparison is only at a high level of abstraction and seeks to gloss over the technical details that make this case analogous to the one in *CardioNet*, with some support and explanation.

⁵ Compare, e.g., ’043 Patent at 2:50-67, 3:1-27, 12:64-67, 13:1-13; ’545 Patent at 2:44-67, 3:1-5, 13:4-20; ’146 Patent at 2:50-67, 3:1-11, 13:30-46.

Further, Defendant argues that the Asserted Patents are ineligible because the claims rely, to some extent, on “the use of generic and well-known computer components.” (D.I. 36 at 4.) Remarkably, to overcome § 101 rejections, Defendant has taken the opposite position before the PTO, acknowledging that “while the technological solution may require arguably generic components, the claims also require that these arguably generic components work together in a coordinated manner.” Ex. B at 11 (Defendant argued that its “claims [were] directed to an inventive concept with respect to providing an unconventional technological solution (storing FAT content change based on an intercepted write request) to a technological problem (how to avoid additional processing during restoration of a backed up computer before the backed up computer become usable).”)⁶

The Federal Circuit has further noted that courts should be wary of tracing the invention to a real-world analogy, which often oversteps into invalidity based on Sections 102 and 103. *See Data Engine Techs. LLC*, 906 F.3d at 1011. Defendant’s high-level summary allows it to make a library analogy that is inapt and distorted—nothing relating to refinements in a card catalog relates to the types of material the library could store or how the type of information included in the library’s card catalog would improve a library’s efficiency. A library card catalog system lacks many features of the Asserted Patents’ claims. The catalog system, among other things, does not (1) generate a unique descriptor based on actual data, e.g. specific words and phrasings, in the books, (2) assign a new unique descriptor if there is new or changed content of the book, and (3) use the information in the catalog entry itself to authorize access to a book. Instead, a card catalog system is simply a conventional file naming system, which might be analogous to the mere use of filenames by an operating system, but which is far-removed from what is claimed here—solving

⁶ Patents and their file histories are considered matters of public record suitable for judicial notice and consideration at the Rule 12 stage. *See, e.g., Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1008 n.2 (Fed. Cir. 2018).

the challenges involved in storing large-scale data that is constantly changing. In addition, like *CardioNet*, there is nothing in the record here that suggest that the claims merely computerize pre-existing techniques for backing up and restoring electronic data.

The inventions described in the Asserted Patents use improved data deduplication methods to maximize storage utilization. *See* Ex. C at 4 (“Data deduplication decreases the size of backup files.”) The data deduplication task has attracted a considerable amount of attention from the research community as effective and efficient solutions to electronic data storage concerns. Ex. D at 1. “Data deduplication is known as a specialized data compression technique for eliminating duplicate copies of repeating data. This technique is used to improve storage utilization and be applied to network data transfers to reduce the number of bytes that must be sent.” *Id.*; *see* Ex. C at 4 (“Data compression and deduplication let[s] you decrease traffic going over the network and disk space required for storing backup files and VM replicas.”); *Id.* at 8 (“To minimize the amount of traffic going over the network, Veeam Backup & Replication uses the data compression and deduplication technologies.”). “As database size increases day by day the matching process’s complexity becoming one of the major challenges for data deduplication.” Ex. D at 1. In view of *Berkheimer*, it is this type of evidence which should at the very least preclude a ruling at this stage.

Here, the Asserted Patents are directed to unconventional methods for determining whether to back up or restore electronic data using source-side identification and data deduplication on the source side and backup side. These innovative processes address technological problems, *e.g.* inefficiency in backup systems that store large duplicated files, and improve computer functionality through maximizing storage space, reducing bandwidth and subsequent upload time, backing up and restoring entire computers, and controlling access to electronic data. ’043 Patent, Abstract; *see* Ex. C at 2 (as a result of source-side data deduplication, “the load on the network

reduces, the backup job performance improves, and [a user] can save on disk space.”); *see also* Ex. D at 1 (“Removing duplicate records during data cleaning process in a single database is a critical step, because the outcomes of subsequent data processing or data mining may get greatly influenced by duplicates.”) Defendant’s use of a library card catalog system as a comparison fails to address even one of the abovementioned technological problems. Indeed, courts have confirmed that claims relating to “reducing the amount of bandwidth and storage space used” represent technological improvements entitled to patent protection. *Synchronoss Techs., Inc. v. Dropbox Inc.*, 226 F.Supp.3d 1000, 1008 (N.D. Cal. Dec. 22, 2016).⁷

For instance, claim 1 of the ’043 Patent recites a method for “managing an electronic data backup system,” which as properly construed involves, among other things, a specific technological environment in which a collection of modules and applications “receiv[e]” unique first descriptors *generated from identified electronic data* stored on a communication device, “compar[e]” and “determin[e]” whether a first unique descriptor matches a second unique descriptor, and “report” the result of the comparison.

Claim 1 of the ’545 Patent provides additional features beyond those in claim 1 of the ’043 Patent, such as the configuration of a connection for encrypted communications. The claimed system uses an encrypted communication to transmit descriptors from the client device to the backup server, and then transmits files to the backup server only after confirming, using the cryptographic signature, that access is allowed. (*See* D.I. 1, Ex. F.) The use of cryptographic

⁷ *See also Teleconference Sys. LLC v. Metaswitch Networks Corp.*, No. 6:18-CV-234-JDK, 2019 WL 6699820, at *4 (E.D. Tex. Feb. 5, 2019) (patent that “sought to improve the security, bandwidth utilization, quality of service, and deployment and management” was valid); *InfoGation Corp. v. ZTE Corp.*, No. 16-CV-01901-H-JLB, 2017 WL 1135638, at *6 (S.D. Cal. Mar. 27, 2017); *Mobile Telecommunications Techs., LLC v. Leap Wireless Int’l, Inc.*, No. 2:13-CV-885-RSP, 2015 WL 5604691, at *4 (E.D. Tex. Sept. 23, 2015) (finding claims not abstract because “the combination of these elements purports to solve bandwidth and interference problems”).

signatures prevents unauthorized users from accessing files in the backup storage. '545 Patent at 3:6-20.

Claim 1 of the '146 Patent describes a solution for synchronization of a first client device onto a second client device using elements as described in the '043 Patent and the '545 Patent. After uploading the original electronic data, the second client device determines that whether it has the data that is uniquely identified by the cryptographic signature in its remote storage medium. (*See* D.I. 1, Ex. E.) The system then determines that the second client device's remote storage medium is permitted to have this electronic data. (*Id.*) Only then is the data transmitted to the second client device, thus completing the synchronization without duplication. (*Id.*)

These technical claims are not abstract. Indeed, on June 2, 2020, U.S. Pat. No. 10,671,761⁸ (the "'761 Patent") having the same title as the Asserted Patents was issued to Plaintiff. *See* Ex. A. The '761 Patent is a continuation of the '146 Patent and shares the same specification as the Asserted Patents. (Ostrow Decl. at ¶ 4.) The PTO Examiner did not issue a rejection under *Alice* or Section 101 throughout the prosecution of the '761 Patent and instead concluded its claims satisfied the patentable subject matter standards under Section 101. (*Id.* at ¶ 5; *see* Ex. E.) At the same time, however, the Examiner issued a double patenting rejection over the '043 Patent,⁹ arguing the '761 Patent's claims were not patentably distinct, and thus were similar in general subject matter to, the '043 Patent's claims. (Ostrow Decl. at ¶ 6; *see* Ex. E.) The Examiner's simultaneous conclusions that the claims of the '761 Patent were similar in subject matter to the '043 Patent are not abstract suggest the same conclusion should be reached at least as to the claims of the '043 Patent, if not all Asserted Patents.

⁸ Patents and their file histories are considered matters of public record suitable for judicial notice. *See, e.g., In re Lipitor Antitrust Litigation*, No. 3:12-cv-2389, 2013 WL 4780496 at *1 (D.N.J. Sept. 5, 2013); *see also Data Engine Techs. LLC*, 906 F.3d at 1008 n.2.

⁹ The double patenting rejection was overcome by the filing of a terminal disclaimer. (Ostrow Decl. at ¶ 6.)

Defendant then argues that the “claimed generation and comparison of descriptors is merely ‘computerizing’ a conventional process known in the art.” (D.I. 36 at 13 (internal citation omitted)). But where “certain aspects of the functionality of the claimed platforms is specified through programming logic [this] is not an impediment to subject matter eligibility...[n]or is it a bar if the individual elements of the claimed systems are ... routine and conventional in the art.” *Egenera, Inc. v. Cisco Sys., Inc.*, 234 F. Supp. 3d 331, 343 (D. Mass. 2017); *see* ’043 Patent at 9:59-67, 10:1-21 (“a descriptor generating algorithm that may be utilized include, without limitation, an MD5 hash, SHA256, SSh256, crc-32, and any other hash generating algorithm known in the art”). Similar to the *Egenera* claims found not abstract, the claims here require the system’s computer components to perform specialized functions to accomplish the stated goal. *See, e.g.*, ’043 Patent at 2:52-67, 3:1-13, 10:61-67, 11:1-15.

Further, “[a]bstraction is avoided or overcome when a proposed new application or computer-implemented function is not simply the generalized use of a computer as a tool to conduct a known or obvious process, but instead is an improvement to the capability of the system as a whole.” *Trading Techs. Int’l, Inc. v. CQG, Inc.*, 675 Fed. Appx. 1001, 1005 (Fed. Cir. 2017) (citing *Enfish*, 822 F.3d at 1339); *see also CardioNet, LLC*, 955 F.3d at 1368 (the Court found that the claims “‘focus on a specific means or method that improves’ cardiac monitoring technology; they are not ‘directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.’”) As described above, the claimed inventions of the Asserted Patents relate to backup methods that amplify storage capacity, reduce the amount of bandwidth and subsequent upload time, perform complete backups and restorations, and securely control access to files by using source-side data identification and global data deduplication technologies. *Cf. Id.* at 1370 (The asserted claims were “directed to a specific technological improvement—an

improved medical device that achieves speedier, more accurate, and clinically significant detection of two specific medical conditions out of a host of possible heart conditions.”)

Moreover, Defendant improperly attacks only certain elements individually, making no attempt to determine whether the character of the claims as a whole is directed to excluded subject matter. *Trading Techs. Int’l.*, 675 Fed. Appx. at 1005. The Asserted Patents are not directed to merely “the abstract idea of using shorthand descriptors to manage inventory” as Defendant suggests. (D.I. 36 at 9.) Rather, when all elements are considered, the claims of the Asserted Patents improve the capabilities of an electronic data backup system as a whole by incorporating a specific implementation of a solution that addresses express technical problems, *e.g.*, avoiding the back up of duplicate data from the source side. *See Trading Techs. Int’l.*, 675 Fed. Appx. at 1006. Interestingly, to overcome § 101 rejections, Defendant has argued that its own patents are not abstract because they relate to avoiding “copying unnecessary data blocks from the source disk during backup.” Ex. B at 11.

Defendant’s reliance on cases where courts have invalidated claims “that merely collect, classify, or otherwise filter data” under Section 101 is misplaced. The Federal Circuit has only found such claims impermissibly abstract when the claim limitations fail to explain the improvement in computer technology. *See Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327-28 (Fed. Cir. 2017) (the claims of the Asserted Patents were directed to “creating an index [that includes tags and metafiles] and using that index to search for and retrieve data”); *see also CardioNet, LLC v. Scottcare Corp.*, 388 F. Supp. 3d 442, 455 (E.D. Pa. 2019) (plaintiff “failed to show that the focus of the asserted claims of the ’237 Patent are directed to an improvement in computer functionality, as opposed to generic gathering and processing activities

that can be carried out manually”)¹⁰; *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 612 (Fed. Cir. 2016) (the court invalidated the claims as patentee failed to illustrate “a specific improvement to computer functionality” or “a solution to a ‘technological problem.’”); *PersonalWeb Technologies LLC v. Google LLC*, No. 5:13-cv-01317-EJD, 2020 WL 520618, at *12 (N.D. Cal. Jan. 31, 2020) (plaintiff failed to prove its claims were directed at improving computer functionality in some concrete way or created solutions to computer-centric problems). Further, Defendant fails to offer any detailed analysis comparing the language of the Asserted Patents’ claims to any of the claims in Defendants’ cited cases.

Finally, at least two claims, Claims 15 and 35 of the ’043 Patent, are directed to physical devices and are therefore not abstract. Where “[t]he weight of the claim clearly focuses on a tangible, non-abstract device as the invention which, through the allegedly unconventional combination of components” achieves a specific purpose, the claim is not directed to an abstract idea. *Immersion Corp. v. Fitbit, Inc.*, 313 F. Supp. 3d 1005, 1023 (N.D. Cal. Mar. 5, 2018) (citing *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1348-1349 (Fed. Cir. 2017)).¹¹ Defendant cites no authority to the contrary and therefore, at a minimum, has failed to establish these claims to physical devices are abstract or invalid. But as detailed above, this conclusion holds true for all challenged claims.

¹⁰ Further, this case involved at least one patent, 7,941,207, involved in an appeal (*supra*, *Cardionet, LLC*, 955 F.3d 1358) in which the Federal Circuit overturned the district court’s determination and found that the same patent is valid under Section 101. 955 F.3d at 1362. Thus, Defendant’s reliance on this case is misplaced.

¹¹ See also *Ironworks Patents, LLC v. Apple Inc.*, No. CV 17-1399-RGA, 2018 WL 2944475, at *3 (D. Del. June 12, 2018); *Polaris Innovations Ltd. v. Kingston Tech. Co.*, 223 F. Supp. 3d 1026, 1034 (C.D. Cal. 2016); *POWERbahn, LLC v. Found. Fitness LLC*, No. 3:15-cv-00327-MMD-WGC, 2016 WL 4318978, at *3 (D. Nev. Aug. 11, 2016) (“While it is true that the claim includes a formula, the claim is clearly directed at a piece of exercise equipment...”); *Baxter Int’l, Inc. v. Carefusion Corp.*, No. 15-cv-9986, 2016 WL 2770787, at *9 (N.D. Ill. May 13, 2016); *Avocent Huntsville, LLC v. ZPE Systems, Inc.*, No 3:17-cv-04319-WHO, 2018 WL 1411100, at *11-13 (N.D. Cal. Mar. 21, 2018) (finding claims not abstract where claims were “tied to concrete structures, with [a] specific goal”).

B. The Claims Are Not Abstract at Step Two Because the Claims Contain an Inventive Concept

Although the Court is not required to evaluate Step Two if it concludes the claims are not abstract, this step of the *Alice* framework involves identifying the “inventive concept” and determining whether it is “sufficient to transform the nature of the claim into a patent-eligible application.” *McRO, Inc.*, 837 F.3d at 1312 (citing *Alice*, 134 S. Ct. at 2355) (quotations omitted). This step entails looking at the elements of the claim and the claim *as a whole* “to determine whether the claims contain an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* (citations omitted).

In the context of the Internet arts, the court in *Network Congestion* phrased the question in Step Two as “whether the claims are directed to a problem specifically arising in the realm of computer technology and the claimed solution specifies how computer technology should be manipulated to overcome the problem.” *Network Congestion Solutions, LLC v. U.S. Cellular Corp.*, 170 F. Supp. 3d 695, 699 (D. Del. 2016) (citing *DDR Holdings, LLC*, 773 F.3d at 1257) (quotations omitted); *see also CardioNet, LLC*, 955 F.3d at 1371 (finding valid claims that “fit into the class of claims that focus on ‘an improvement in computers [and other technologies] as tools.’” (brackets in original)).

Assuming, *arguendo*, that the Court finds any of the claims directed to abstract ideas, the claims nevertheless recite limitations, discussed in detail above, that, as a whole, amount to significantly more than such abstract ideas. The claims of the Asserted Patents include limitations that present an improvement in computer functionality relating to backup and restore solutions for communication and computer systems. Prior to the invention, such solutions did not exist. Previous service providers were only capable of backing up user-generated “data,” *e.g.* documents,

pictures, or music. Providers that could back up the configuration of the system, *i.e.* programs, system files, configurations, or user settings, used inefficient and ineffective means. '043 Patent at 1:59-67, 2:1-3. The solution in the Asserted Patents provides for a complete backup without these limitations or inefficiencies.

Here, Defendant offers nothing to demonstrate the claimed elements individually or as a combination were “well-understood, routine, and conventional activities previously known to the industry.” *Aatrix Software, Inc.*, 882 F.3d at 1128. The claims in the Asserted Patents recite specific inventive limitations, discussed above, that when considered individually and as a whole claim substantially more than an abstract idea. The claims recite a system that reduces the amount of data transmitted from the communication device to a backup server, culminating in only original data stored in a backup storage system. These claims incorporate source-side identification methods where applications on the communication device detect redundant data, deleted, and/or new or changed data prior to transmitting said data to the backup server. Later publications recognized that eliminating duplicate copies improves storage utilization and reduces the bytes that must be transferred between the client device and backup server. (D.I. 1 at ¶18.) Here, Defendant failed to offer any evidence, or even arguments rebutting these allegations in the Complaint. (*Compare* D.I. 36.)

Where, as is the case here, claims “are directed to systems that improve computer functionality, they claim patent-eligible subject matter.” *Egenera, Inc. v. Cisco Sys., Inc.*, 234 F. Supp. 3d 331, 344–45 (D. Mass. 2017); *see also Sophos Inc. v. Rpost Holdings, Inc.*, Nos. 13-12856-DJC, 14-13628-DJC, 2016 WL 3149649, *12 (D. Mass. June 3, 2016) (“the patents-in-suit aim to solve a technical problem of electronic messages, which because of their form, present unique challenges for establishing proof of receipt and delivery”). Thus, Hybir sufficiently

demonstrated that the Asserted Patents claim a technological solution to a technological problem, and is patent eligible at Step Two.

Thus, as discussed further below, the present claims contain numerous limitations that place them well within the category of technical solutions to technological problems.

C. Questions of Fact Preclude Judgment on the Pleadings

Hybir pled sufficient facts to show a genuine issue of fact regarding Step Two of the *Alice* test. “[W]hether a claim element or combination is well-understood, routine, and conventional is a question of fact.” *Aatrix Software, Inc.*, 890 F.3d at 1359.¹² “A patent is presumed valid, and the burden of establishing invalidity of a claim rests on the party asserting invalidity by clear and convincing evidence.” *Core Wireless*, 880 F.3d at 1364. Further, the Federal Circuit has explained that, while early dispositive motions applying Section 101 are possible, “it will ordinarily be desirable—and *often necessary*—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter.” *Bancorp Servs., LLC v. Sun Life Assur. Co. of Can.* (U.S.), 687 F.3d 1266, 1273-1274 (Fed. Cir. 2012) (emphasis added). Defendant failed to meet this heavy burden to establish it would be proper to invalidate the Asserted Patents at this early stage.

The Complaint and supporting exhibits establish a question of fact as to whether the claims are well-understood, routine, or conventional. Paragraphs 12-17 provide detailed allegations

¹² District courts have denied motions at the Rule 12 stage because “what would have been well known to ‘a skilled artisan in the relevant field’ at the time the patents were issued” can be difficult to determine at the pleading stage. *Pure Data Sys., LLC v. Ubisoft, Inc.*, 329 F.Supp.3d 1054, 1067 (N.D. Cal. July 13, 2018). See also *Hypermedia Navigation LLC v. Facebook, Inc.*, No. 17-CV-05383-HSG, 2018 WL 3932434, at *5 (N.D. Cal. Aug. 16, 2018); *Symantec Corp. v. Zscaler, Inc.*, No. 17-CV-04426-JST, 2018 WL 3539269, at *5 (N.D. Cal. July 23, 2018) (noting that the specification itself can “raise[] an issue of fact as to inventiveness”); *Illumina, Inc. v. Natera, Inc.*, No. 18-CV-01662-SI, 2018 WL 3126383, at *4 (N.D. Cal. June 26, 2018); *TMI Solutions LLC v. Bath & Body Works*, No. 17-965-LPS-CJB, 2018 WL 4660370, at *8 (D. Del. Sept. 28, 2018) (finding dismissal under Rule 12 not appropriate where “complaint adequately and plausibly alleges that the claims capture a non-routine, unconventional, and not well-understood activity, and may improve the functioning of computers”).

regarding the technological nature of the problem and solution addressed by the Asserted Patents. (D.I. 1 at ¶¶12-17.) Paragraphs 12 and 14 detail concerns of computer data management including limitations on the usefulness of backup systems at the time of the inventions claimed in the Asserted Patents. Paragraphs 13-17 demonstrate that the Asserted Patents resolve concerns relating to the usefulness of backup system had been identified by those in the art. Finally, Paragraph 18 alleges that the inventions claimed in the Asserted Patents are recognized and praised in the industry. *See, e.g., Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1304 (Fed. Cir. 2010) (identifying praise as one factor contributing to a determination that a claimed invention is non-obvious).

Defendant's arguments—insufficient to satisfy the clear and convincing evidence standard in their own right—serve only to highlight the factual disputes that exist relating to the Asserted Patents. Defendant presents mere attorney argument and conclusory statements regarding the level of skill and knowledge in the relevant field without addressing the allegations in the Complaint, the attached material, or even the differences and details of the claims. Attorney argument is insufficient, as a matter of law, to carry Defendants' burden of proof by clear and convincing evidence. *Berkheimer*, 881 F.3d at 1367-68. Thus, the Court should deny the Motion because factual disputes demonstrate that Defendant has failed to establish by clear and convincing evidence that the Asserted Patents' claims are directed to abstract ideas.

V. CONCLUSION

For the foregoing reasons, Plaintiff respectfully requests that the Court deny Defendant's amended motion to dismiss and issue a finding that the claims of the Asserted Patents are directed to patent eligible subject matter under 35 U.S.C. § 101 or at the very least preclude judgment at this stage as there are questions of fact that underline the Court's patent eligibility determination

in view of the documents and other materials presented herein which show the unconventional nature of the claimed inventions.

REQUEST FOR ORAL ARGUMENT

Pursuant to Local Rule. 7.1(d), Plaintiff requests an oral argument.

PLAINTIFF HYBIR, INC.

By its attorneys,

Dated: July 10, 2020

/s/ Seth H. Ostrow

Seth H. Ostrow (MA Bar No. 562546)
Robert P. Feinland (admitted *pro hac vice*)
MEISTER SEELIG & FEIN LLP
125 Park Avenue, 7th Floor
New York, NY 10017
Telephone: (212) 655-3500
Facsimile: (212) 655-353
sho@msf-law.com
rf@msf-law.com

CERTIFICATE OF SERVICE

In accordance with Local Rule 5.2(b), I, Seth H. Ostrow, hereby certify that this document filed through the ECF system on July 10, 2020 will be sent electronically to the registered participants as identified on the Notice of Electronic Filing and paper copies will be sent to those indicated as non-registered participants.

/s/ Seth H. Ostrow
Seth H. Ostrow, Esq.